DRAFT

Answers to Health Department Check List Questions

1. Natural U_3O_8 and ThO_2 (source material).

2. Form

The ores will be processed in an electric arc furnace where the material will be heated until it becomes molten. At this time reducing agent will be added to reduce the columbium oxide to a metallic. A slag-metal separation is made and the molten slag is poured into 20 cubic foot cast iron pots and allowed to solidify. The solid slag is then dumped and is ready for disposal.

The slag is a mixture of chemical compounds in a solid state similar to rock formations ranging in size from 2,000 lbs. by down pieces. The Thorium or Uranium oxides will be dispersed through the pieces of slag.

Analysis of 250 NT Uranium Bearing Slag presently stored at plant site.

U_3O_8	.25%
Cb_2O_5	2.00
Ta_2O_5	.70
TiO_2	2.30
ZrO_2	1.00
Al_2O_3	50.00
CaO	25.00
MgO	14.25
Other rare earth oxides	3.50

Analysis of material to be generated 50,000 lbs. for test purposes and 100,000 lbs. to be generated per month, if successful.

ThO_2	1.25%
Cb_2O_5	1.00
Zr_2O_3	1.00
MgO	15.00
Al_2O_3	55.00
CaO	27.50

3. No salts will be added. Lime and alumina will be added to the ore and columbium removed.

4. None

5. Quantity to be disposed of --

   1. Immediately - 250 NT slag containing .25% U_3O_8 or 1250 lbs. U_3O_8.